

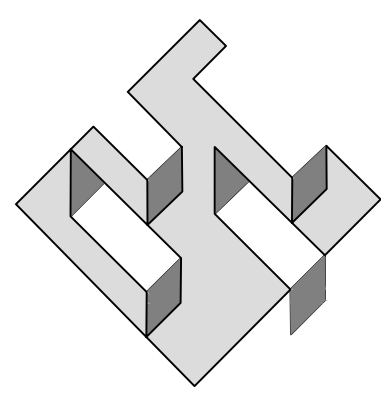
30% CONCEPTUAL PLAN

VAN DORN & BEAUREGARD BIKE FACILITY

& SHARED USE PATH

ALEXANDRIA, VIRGINIA

PROJECT NUMBERS
STATE PROJECT # - U000-100-814
FEDERAL JOB # - P101 FEDERAL #CMAQ-5B01(105)
UPC# - 105563
RFQU # - 912
CCL# - 21266.001.00

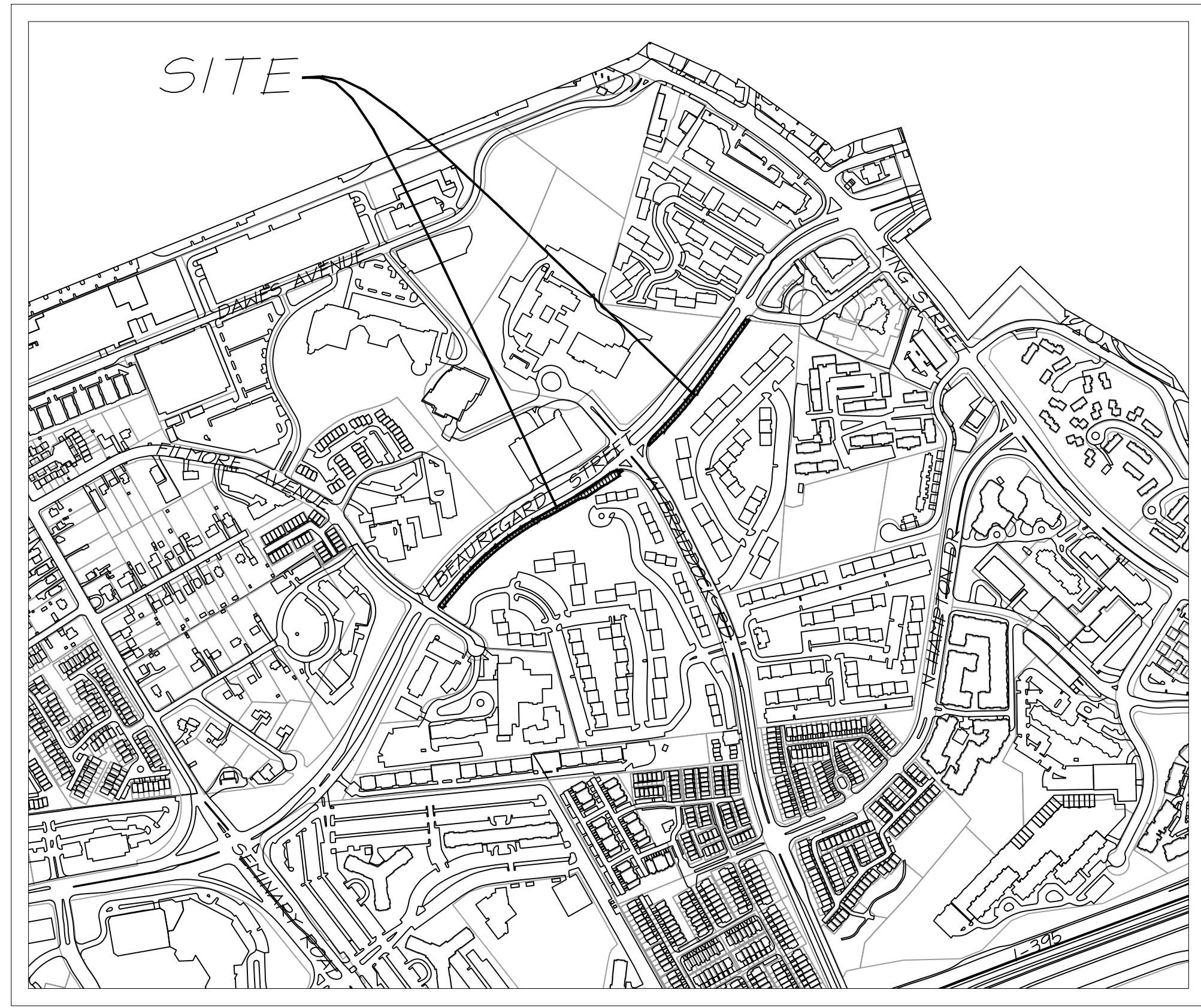


PREPARED BY:
christopher consultants
engineering · surveying · land planning
christopher consultants, ltd.
9900 main street (fourth floor) · fairfax, va 22031-3907
703.273.6820 · fax 703.273.7636

NARRATIVE DESCRIPTION OF THE PROJECT

THIS PROJECT CONSISTS OF APPROXIMATELY 2,000 LINEAR FEET OF A 10' WIDE SHARED USE PATH ALONG THE SOUTH SIDE OF NORTH BEAUREGARD STREET BETWEEN FILLMORE AVENUE AND BERKELEY STREET. THIS TRAIL IS DESIGNED TO BE LEVEL 1 PERMEABLE PAVEMENT AND WILL REQUIRE TWO RETAINING WALLS TO ACCOMMODATE THE EXPANDED WIDTH OF THE SHARED USE PATH.

- NOTES:
- THIS SITE IS LOCATED IN A RESOURCE PROTECTION AREA (RPA). A FIELD INVESTIGATION TO LOCATE THE EXTENTS OF THE RPA IS CURRENTLY IN PROGRESS AND THE PLAN WILL BE UPDATED WITH THE RESULTS OF THAT INVESTIGATION WITH THE NEXT SUBMISSION. THE RPA LINE IDENTIFIED ON THIS PLAN IS PROVIDED FROM GIS INFORMATION AND IS AN APPROXIMATE LOCATION.
 - THIS PROJECT CONTAINS STEEP SLOPES ALONG THE SOUTH SIDE OF THE PROJECT LIMITS.
 - TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO AREAS ON-SITE CONTAINING CONTAMINATED SOILS OR CONTAMINATED GROUNDWATER.
 - IN ACCORDANCE WITH THE CITY OF ALEXANDRIA'S MARINE CLAY AREAS MAP DATED NOVEMBER 1976, THERE ARE NO AREAS OF MARINE CLAY LOCATED IN THE VICINITY OF THIS SITE.
 - THIS PROJECT IS NOT LOCATED WITHIN A COMBINED SEWER AREA.



LOCATION MAP
SCALE 1"= 500'

SHEET INDEX

CIVIL	
C000	COVER SHEET
C100-C101	GENERAL NOTES
C200	SITE DETAILS
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C400-C401	CONCEPTUAL SITE PLAN
C500-C501	CONCEPTUAL GRADING PLAN
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C503	CONCEPTUAL SIGNAGE PLAN
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C800	CONCEPTUAL EROSION & SEDIMENT CONTROL PLAN - PHASE 1
C900-C901	ROW AND EASEMENT EXHIBIT

PROFESSIONAL SEAL AND SIGNATURE	DATE	REVISION
	10-21-21	30% SUBMISSION

OWNER/APPLICANT
CITY OF ALEXANDRIA
301 KING STREET
ALEXANDRIA, VA 22314
(703) 746-4045

CIVIL ENGINEER
christopher consultants, ltd.
9900 MAIN STREET
SUITE 400
FAIRFAX, VIRGINIA 22031
(703) 273-6820

ENVIRONMENTAL ENGINEER
WETLAND STUDIES AND SOLUTIONS, INC.
5300 WELLINGTON BRANCH DRIVE
SUITE 100
GAINESVILLE, VIRGINIA 20155
(703) 679-5600

GEOTECHNICAL ENGINEER
DULLES GEOTECHNICAL
14155 SULLYFIELD CIRCLE
SUITE H
CHANTILLY, VA 20151
(703) 999-3207

COST ESTIMATOR
PROCON CONSULTING
1005 N. GLEBE
SUITE 325
ARLINGTON, VA 22201
(703) 527-7059

ROW/EASEMENT ACQUISITION SPECIALIST
ERM AND ASSOCIATES
49 CULPEPPER STREET
WARRENTON, VA 20186
(540) 347-5547

SITE ASSESSMENT:

1. THERE ARE NO TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR OFFSHORE AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. THERE ARE NO WETLANDS PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. THIS PROJECT IS LOCATED IN A RPA AND HAS STEEP SLOPES.
2. THIS PROJECT IS NOT LOCATED WITHIN A 100-YR FLOOD PLAIN.
3. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, DIVISION OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT SUBSAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, AND SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE AND CITY REGULATIONS.
4. IF REQUIRED, ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH STATE WELL REGULATION. CONTACT THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4986.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY BE INCURRED BY THE CONTRACTOR OR OTHERS TO PRESERVE THESE UNDERGROUND UTILITIES. IF, DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE LOCATIONS SHOWN ON THE PLANS, HE/SHE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND PROPERTY OWNERS AND TAKE THE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
2. THE DEPTHS AND LOCATIONS OF ANY UNDERGROUND ELECTRIC, WATER, TELEPHONE, GAS MAINS OR OTHER UTILITIES THAT CANNOT BE FIELD SURVEYED, CALL MISS UTILITY (1-800-257-7777) 48 HOURS PRIOR TO EXCAVATING TO LOCATE THE UNDERGROUND UTILITIES.

1. THE FINAL SITE PLAN, GRADING PLAN, OR ANY OTHER PERMITS INVOLVING GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, OR UNDERMINING) IN CONNECTION WITH ANY OF THE OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) SHALL NOT BE RELEASED UNTIL THE CITY ARCHAEOLOGIST CONFIRMS THAT ALL ARCHAEOLOGICAL FIELD WORK HAS BEEN COMPLETED OR THAT AN APPROVED MONITORING AND MITIGATION SCHEDULE HAS BEEN DEVELOPED AND AGREED IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT (703) 746-4399.
2. CALL ALEXANDRIA ARCHAEOLOGY IN (703) 746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.

1. PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, A RODENT ABATEMENT PLAN SHALL BE SUBMITTED TO THE CITY OF ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION THAT WILL OUTLINE STEPS WHAT STEPS HAVE AND WILL BE TAKEN TO PREVENT THE SPREAD OF RODENTS FROM THE CONSTRUCTION SITE TO THE SURROUNDING COMMUNITY AND SEWERS. THE CONTRACTOR CAN CONTACT ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION AT (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION. PLEASE BE ADVISED ONCE ANY DEMOLITION HAS BEEN COMPLETED ANY ABOVE GRADE BAIT BOXES MUST BE RELOCATED TO WITHIN 30 FEET OF A STRUCTURE TO PREVENT RODENT INTRUSION. IF THIS IS NOT POSSIBLE, THEY SHALL BE REMOVED AND REGULAR INSPECTIONS OF THE SITE CONDUCTED BY A VIRGINIA LICENSED PEST EXTERMINATOR TO ENSURE THE SITE REMAINS RODENT FREE.

1. SINCE STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICE (BMP) SYSTEMS THAT HOLD WATER FOR MORE THAN 5 DAYS BETWEEN THE MONTHS OF MARCH AND OCTOBER CAN HAVE THE POTENTIAL TO CAUSE MOSQUITO BREEDING HABITATS; THEREFORE, SUCH BMPs SHALL BE TREATED WITH A REGISTERED MOSQUITO LARVAL CONTROL PRODUCT. ALL LABELS SHOULD BE FOLLOWED FOR APPLICATION RATES AND AMOUNTS.
2. SINCE EXCESSIVE VEGETATION IN EXISTING BMPs ALSO INCREASES THE POTENTIAL FOR MOSQUITO PROBLEMS; THEREFORE VEGETATION SHALL BE CONTROLLED AND CUT TO REDUCE MOSQUITO BREEDING.
3. CONTACT THE CITY OF ALEXANDRIA ENVIRONMENTAL HEALTH VECTOR BORNE ILLNESS PROGRAM (703-838-4910) FOR QUESTIONS OR TREATMENT ASSISTANCE.

1. SANITARY AND STORM SEWERS ARE MAINTAINED BY THE CITY OF ALEXANDRIA.
2. WATER LINES ARE MAINTAINED BY VIRGINIA AMERICAN WATER (VAW). ALL EXISTING WATER LINES ARE SHOWN WITH AN ASSUMED DEPTH OF COVER OF 3.5' PER VAW REQUIREMENTS, HOWEVER, TEST PITS WILL BE REQUIRED IN ORDER TO DETERMINE THE ACTUAL DEPTH.
3. GAS LINES ARE OWNED AND MAINTAINED BY WASHINGTON GAS.
4. ELECTRIC LINES ARE OWNED AND MAINTAINED BY DOMINION VIRGINIA POWER.
5. CABLE LINES ARE OWNED AND MAINTAINED BY COMCAST.
6. TELEPHONE LINES ARE OWNED AND MAINTAINED BY VERIZON.
7. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. ALL EXCAVATION MATERIAL TO BE REPLACED INTO THE TRENCH SHALL BE STOCKPILED ON THE HIGH SIDE OF THE TRENCH. IF ANY TRENCH WORK WILL REMAIN OPEN AFTER THE END OF THE WORKDAY ALL NEEDED EROSION AND SEDIMENT CONTROLS SHALL BE EMPLOYED. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AND AS DETERMINED BY THE CITY OF ALEXANDRIA.

1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY BE INCURRED BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY ACTION AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUATION OF SERVICE.
2. THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED FOLLOWING NOTIFICATION AND MARKING OF ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES. TEST HOLES TO BE PERFORMED AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE OWNER AND ENGINEER. REDESIGN AND APPROVAL BY REVIEWING AGENCIES SHALL BE OBTAINED, IF REQUIRED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
4. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
5. THE CONTRACTOR SHALL CLEAN THE SITE OF ALL TREES, BUILDINGS, FOUNDATIONS, ETC. WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SPECIFIED, AND SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE DISCONNECTED.
6. THE DEVELOPER SHALL PROVIDE OVER-LOT GRADING TO PROVIDE POSITIVE DRAINAGE AND PRECLUDE PONDING OF WATER.
7. ALL AREAS, ON OR OFF-SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. THE MINIMUM ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS, SEED MIXTURE TO BE RECOMMENDED BY THE CITY AGENT, ALL SLOPES 3:1 AND GREATER SHALL BE SOBBED AND PEGGED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY OF ALEXANDRIA.
8. EXISTING SEPTIC FIELDS, IF APPLICABLE, SHALL BE ABANDONED IN ACCORDANCE WITH VIRGINIA HEALTH DEPARTMENT STANDARDS AND SPECIFICATIONS.
9. ALL ABOVE GROUND UTILITIES SERVING THE SITE SHALL BE RELOCATED AS REQUIRED BY THE OWNING UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS AND COORDINATING ALL WORK REQUIRED FOR THE NECESSARY RELOCATIONS.
10. PRIOR TO BEGINNING OF CONSTRUCTION, CONTRACTOR SHALL VERIFY FROM THE ARCHITECTURAL DRAWINGS ALL DIMENSIONS, DETAILS AND TREATMENTS FOR THE PROPOSED BUILDINGS, WALKWAYS AND OTHER PROPOSED CONSTRUCTION WHERE INDICATED ON THE PLANS.
11. THE CONTRACTOR IS TO VERIFY INVERT, SIZE AND LOCATION OF BUILDING UTILITY CONNECTIONS WITH THE MECHANICAL PLANS PRIOR TO PLACEMENT OF UNDERGROUND UTILITIES.
12. EXISTING BUILDINGS, FENCES AND OTHER EXISTING PHYSICAL FEATURES ARE TO BE REMOVED AS REQUIRED BY THE CONTRACTOR.
13. EXISTING CONSTRUCTION SHALL BE REMOVED TO NEAREST JCT. NEW CONSTRUCTION SHALL BE PROVIDED AS SHOWN AND ANY DAMAGED AREA SHALL BE REPAIRED TO MATCH CONDITIONS EXISTING PRIOR TO CONSTRUCTION OR TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
14. ALL PRIVATE BUILDING CONNECTIONS ARE TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.

ACTUAL DETERMINATION OF REQUIRED THICKNESSES OF SURFACE, BASE, SUB-BASE, AND SUB GRADE MATERIALS; THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DESIGN OF THE PAVEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF A GEOTECHNICAL/GEOTECHNICAL PROFESSIONAL ENGINEER TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION.

23. THE THICKNESSES OF SUB-BASE, BASE, AND WEARING COURSE SHALL BE DESIGNED USING "CALIFORNIA METHOD" AS SET FORTH ON PAGE 3-76 OF THE SECOND EDITION OF A BOOK ENTITLED, "DATA BOOK FOR CIVIL ENGINEERS, VOLUME ONE, DESIGN" WRITTEN BY ELYNN E. SEELEY. AN ALTERNATE PAVEMENT SECTION DESIGNED TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING BASED ON CBR AND VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) METHOD (VASWANI METHOD) AND STANDARD MATERIAL SPECIFICATIONS SHALL BE ACCEPTABLE.

24. EMERGENCY VEHICLE EASEMENTS (EVE) AND AMERICAN WITH DISABILITY (ADA) ACCESSIBLE PARKING SPACES MUST BE DELINEATED WITH PAVEMENT MARKINGS PER THE CITY OF ALEXANDRIA STANDARD SIGNAGE AND AMERICAN WITH DISABILITIES (ADA) REQUIREMENTS.

25. ALL STRIPING SHALL MEET THE REQUIREMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS (LATEST EDITION) AND SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.

26. ALL EARTHWORK OPERATIONS ARE TO BE PERFORMED UNDER THE FULL TIME, ON-SITE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER WITH GEOTECHNICAL TESTING IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS.

27. THE CONTRACTORS SHALL NOT CAUSE OR PERMIT VEHICLES TO IDLE FOR MORE THAN 10 MINUTES WHEN PARKED.

28. UNLESS OTHERWISE APPROVED THE CONTRACTOR SHALL PROVIDE THERMOPLASTIC LADDER STYLE/STANDARD PEDESTRIAN CROSS WALKS AT ALL CROSSINGS AT THE PROPOSED DEVELOPMENT, WHICH MUST BE DESIGNED TO THE SATISFACTION OF THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE DESIGN OF LADDER STYLE OR STANDARD PEDESTRIAN CROSS WALK SHALL BE EVALUATED ON A CASE BY CASE BASIS AND SHALL COMPLY WITH THE REQUIREMENTS OF POLICY MANUAL, SECTION 30.15, PEDESTRIAN CROSSWALKS, JULY 13, 2008. A COPY OF THE POLICY MANUAL CAN BE OBTAINED FROM JON LAMBERT, BICYCLE AND PEDESTRIAN COORDINATOR/TRANSPORTATION PLANNER, TELEPHONE (703) 746-4081.

DEVELOPMENT. THIS PROGRAM SHALL CONTROL WASTES SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER OR TRASH, TRASH GENERATED BY CONSTRUCTION WORKER OR MOBILE FOOD VENDOR BUSINESSES SERVING THEM, AND ALL SANITARY WASTE AT THE CONSTRUCTION SITE AND PREVENT OFFSITE MIGRATION THAT MAY CAUSE ADVERSE IMPACTS TO NEIGHBORING PROPERTIES OR TO THE ENVIRONMENT TO THE SATISFACTION OF DIRECTORS OF T&ES AND CODE ADMINISTRATION. ALL WASTES SHALL BE PROPERLY DISPOSED OFFSITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS.

AND		F	
∠	ANGLE	FD	FLOOR DRAIN
@	AT	FDC	FIRE DEPARTMENT CONNECTION
⊙	CENTER LINE	FF	FINISH FLOOR
⌀	DIAMETER	FH	FIRE HYDRANT
Δ	DELTA	FL	FLOW LINE
ℙ	PROPERTY LINE	FM	FORCE MAIN
W/	WITH	FDN	FOUNDATION
A		FO	FIBER OPTIC
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	FOC	FACE OF CURB
AC	ACRE	FP	FLOOD PLAIN
AC-FT	ACRE-FEET	FT	FEET/FOOT
AD	AREA DRAIN	G	
ADJ	ADJACENT	G	GAS
AGGR	AGGREGATE	GA	GAUGE
ANGS	AMERICAN NATIONAL STANDARDS INSTITUTE	GAL	GALLON
ARCH	ARCHITECTURAL	GALV	GALVANIZED
ASPH	ASPHALT	GFA	GROSS FLOOR AREA
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GIS	GEOGRAPHICAL INFORMATION SYSTEM
AVG	AVERAGE	GM	GAS METER
AWWA	AMERICAN WATER WORKS ASSOCIATION	GPM	GALLONS PER MINUTE
B		GR	GUARD RAIL
BF	BASEMENT FLOOR	GW	GAS VALVE
BLDG	BUILDING	GV	GUY WIRE
BM	BENCHMARK	H	
BOC	BACK OF CURB	HC	HANDICAP COMPLIANT
BOV	BLOW OF VALVE	HB	HORIZONTAL BEND
BSMT	BASEMENT	HDPE	HIGH DENSITY POLY ETHYLENE
BW	BOTTOM OF WALL	HGL	HYDRAULIC GRADE LINE
C		HORIZ	HORIZONTAL
C/O	CLEAN OUT	HP	HIGH POINT
C	RUNOFF COEFFICIENT	HR	HOOR
C&G	CURB AND GUTTER	HR	HANDRAIL
CB	CATCH BASIN	HT	HEIGHT
CBR	CALIFORNIA BEARING RATIO	HW	HEADWATER
C-C	CENTER TO CENTER	I	
CF	CUBIC FOOT	I	RAINFALL INTENSITY
CFS	CUBIC FEET PER SECOND	ID	INSIDE DIAMETER
CIP	CAST-IN-PLACE	IN	INCH
CIR	CIRCLE	INV	INVERT
CJ	CONTROL JOINT	IP	IRON PIPE
CLR	CLEAR	IPF	IRON PIPE FOUND
CMU	CONCRETE MASONRY UNIT	IPS	IRON PIPE SET
CO	CLEAN OUT	J	
COL	COLUMN	JB	JUNCTION BOX
CONT	CONTINUOUS OR CONTINUE	JT	JOINT
CONC	CONCRETE	K	
CONST	CONSTRUCTION	Ke	CULVERT ENTRANCE LOSS COEFFICIENT
CONTR	CONTRACTOR	L	
CORR CY	CORRUGATED CUBIC YARD	L	LENGTH
D		LAT	LATERAL
D	DEPTH	LL	LOWER LEVEL
DA	DRAINAGE AREA	LP	LOW POINT
DEMO	DEMOLITION	LT	LEFT
DEPT	DEPARTMENT	M	
DI	DROP INLET / DUCTILE IRON	M.E.	MATCH EXISTING
DIM	DIMENSION	MAX	MAXIMUM
DIP	DUCTILE IRON PIPE	MECH	MECHANICAL
DIST	DISTANCE	MFR	MANUFACTURER
DOM	DOMESTIC	MIN	MINIMUM
DN	DOWN	MISC	MISCELLANEOUS
DS	DOWN SPOUT	MON	MONUMENT
DTL	DETAIL	MPH	MILE PER HOUR
DWG	DRAWING	MSL	MEAN SEA LEVEL
E		MW	MONITORING WELL
E/W	EACH WAY	N	
EA	EACH	N/A	NOT APPLICABLE
EC	EROSION CONTROL	NFA	NET FLOOR AREA
EG	EDGE OF GRAVEL	NO.	NUMBER
EGL	ENERGY GRADE LINE	NOM.	NOMINAL
ELEC	ELECTRIC	O	
ELEV	ELEVATION	OC	ON CENTER
ENGR	ENGINEER	OD	OUTSIDE DIAMETER
EOC	EDGE OF CONCRETE	O/H	OVERHEAD
EOP	EDGE OF PAVEMENT	OHC	OVERHEAD CABLE
ES	END SECTION	OHE	OVERHEAD ELECTRIC
ESMT	EASEMENT	OHT	OVERHEAD TELEPHONE
EQ	EQUAL	P	
EW	END WALL	P	PERIMETER
EX	EXISTING	PC	POINT OF CURVATURE
EXP	EXPANSION	PCC	POINT OF COMPOUND CURVATURE
		PERF	PERFORATED
		PI	POINT OF INTERSECTION
		PIP	POURED IN PLACE
		PPF	PINCHED PIPE FOUND
		PRC	POINT OF REVERSE CURVATURE
		PROP	PROPOSED
		PSI	POUNDS PER SQUARE INCH
		PVC	POLYVINYL CHLORIDE
		PVMT	PAVEMENT

Q	Q
QTY	FLOW RATE QUANTITY
	R
R	RISER
RAD	RADIUS
R/W	RIGHT OF WAY
RCP	RUNOFF CURVE NUMBER
RCN	REINFORCED CONCRETE
RD	PIPE
REIN	ROOF DRAIN
REINF	REINFORCED/REINFORCING
REQD	REQUIRED
REV	REVISION
RPA	RESOURCE PROTECTION
	AREA
RR	RAILROAD
RT	RIGHT
RTE	ROUTE
	S
SAN	SANITARY
SCH	SCHEDULE
SDF	SPILLWAY DESIGN FLOOD
SEC	SECTION
SEW	SEWER
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
STM	STORM
SVC	SERVICE
S/W	SIDEWALK
SWM	STORM WATER MANAGEMENT

[illegible]

GENERAL NOTES

C100

D

C

B

A

DEMOLITION NOTES:


- A SEPARATE PERMIT IS REQUIRED FOR DEMOLITION; HOWEVER, NO DEMOLITION SHALL BEGIN UNTIL ALL EROSION AND SEDIMENT AND TREE PROTECTION CONTROLS ARE IN PLACE AND ARE APPROVED BY AN EROSION AND SEDIMENT CONTROL INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
2. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE MOST CURRENT APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED TO, ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), VIRGINIA OCCUPATIONAL AND SAFETY HEALTH COMPLIANCE PROGRAM (VOSH ENFORCEMENT), VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT, NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS), AND NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK WITH REPRESENTATIVE UTILITY COMPANIES AND FOR THE IMPLEMENTATION OF REQUIRED UTILITY-RELATED WORK.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY HAZARDOUS MATERIALS DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
5. DISCONNECTION OF SERVICES AND SYSTEMS SUPPLYING UTILITIES TO BE ABANDONED OR DEMOLISHED SHALL BE COMPLETED PRIOR TO OTHER SITE DEMOLITION IN FULL COMPLIANCE WITH APPLICABLE CODES, REGULATIONS AND THE REQUIREMENTS OF UTILITY PURVEYORS HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY PURVEYORS, PAYMENT OF ASSOCIATED FEES AND PROCUREMENT OF ALL NECESSARY PERMITS.
6. PRIOR TO REMOVAL OF MATERIALS OVER EXISTING UTILITY SYSTEMS, THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS AND, IF AT VARIANCE WITH CONDITIONS AS REPRESENTED ON THE PLANS, NOTIFY THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTIONS AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
7. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH APPROVED MATERIALS/CLEAN FILL AS PER THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).
8. THE CONTRACTOR SHALL PROTECT AND PREVENT DAMAGE TO EXISTING ON-SITE UTILITY DISTRIBUTION FACILITIES THAT ARE TO REMAIN. ACTIVE UTILITY DISTRIBUTION FACILITIES ENCOUNTERED DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES SHALL BE SHUT OFF AT THE SERVICE MAIN WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
9. DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY EXISTING UTILITIES AND/OR UTILITY SYSTEM STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DOCUMENT THE SAME AND FORWARD THE INFORMATION TO THE RESIDENT ENGINEER/OWNER'S REPRESENTATIVE, AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
10. THE CONTRACTOR OR APPLICANT SHALL WORK WITH THE CITY STAFF TO REUSE THE EXISTING, LEFTOVER, UNUSED AND/OR DISCARDED BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS OR THE CONSTRUCTION DEBRIS MUST BE REMOVED TO AN APPROVED LANDFILL WITH ADEQUATE FREQUENCY IN ACCORDANCE WITH THE VIRGINIA STATE LITTER CONTROL ACT.

UTILITY WORKS NOTES:

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS DESCRIBED IN SECTION 4VAC50-30-40 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND ADDITIONAL APPLICABLE PRACTICES FOLLOWED BY THE CITY OF ALEXANDRIA:

- ALL PRIVATE UTILITIES SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT OF WAY AND PUBLIC UTILITY EASEMENTS UNLESS THE UTILITY OWNERS HAVE FRANCHISE AGREEMENT WITH THE CITY OF ALEXANDRIA; HOWEVER, NO ELECTRIC TRANSFORMERS AND SWITCH GEARS/CONTROL BOXES SHALL BE PLACED IN THE PUBLIC RIGHT OF WAY.
- B. ALL THE EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS SHALL BE SHOWN AND A DESCRIPTIVE NARRATION OF VARIOUS UTILITIES SHALL BE PROVIDED ON THE PLAN.
- C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN UTILITY SERVICES AT ALL TIMES DURING CONNECTION AND/OR CONSTRUCTION.
- D. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- E. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- F. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- G. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- H. SHOULD UTILITY CONSTRUCTION BE PERFORMED AFTER COMPLETING EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1551) COMPACTION IN ALL TRENCH BACKFILL.
- I. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).
- J. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- K. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA.
- L. A REMEDIATION PLAN SHALL BE SUBMITTED DETAILING HOW CONTAMINATED SOILS AND/OR GROUNDWATER WILL BE DEALT WITH, INCLUDING PLANS TO REMEDIATE UTILITY CORRIDORS.
- M. UTILITY CORRIDORS IN CONTAMINATED SOIL SHALL BE OVER EXCAVATED BY 2 FEET AND BACKFILLED WITH CLEAN SOIL.
- N. GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.
- O. ALL NEW INSTALLATIONS AND/OR REINSTALLATION OF UTILITIES SUCH AS ELECTRICAL LINES, GAS PIPES, COMMUNICATION CABLES INCLUDING WATER AND SEWER LATERALS BOTH ON PRIVATE PROPERTY AND IN THE PUBLIC RIGHT OF WAY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH 3" AND 6" WIDE MIL OVERLAP THICKNESS DETECTABLE UNDERGROUND WARNING TAPES (DUWT). THE 3" DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" AND 6" WIDE AT A DEPTH OF 24" SO AS TO MAKE UNDERGROUND INSTALLATIONS EASY TO FIND USING A NON-FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES, SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE, ACIDS, ALKALIS, AND OTHER SOIL SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS. THE FOLLOWING ARE THE APWA COLOR CODES:

RED	CAUTION BURIED ELECTRIC POWER LINES, CABLES, CONDUITS, AND LIGHTING CABLES
YELLOW	CAUTION GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	CAUTION COMMUNICATIONS, ALARM OR SIGNAL LINES, CABLES OR CONDUITS
BLUE	CAUTION POTABLE WATER
PURPLE	CAUTION RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	CAUTION SEWER, DRAIN LINES AND FORCE MAIN

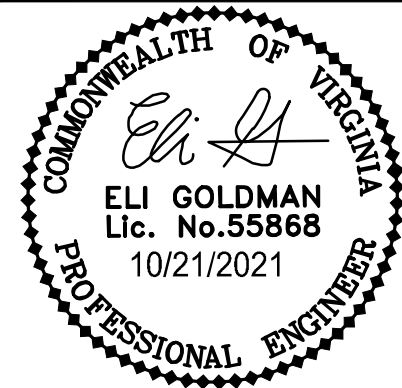


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consultants

9900 main st.
suite 400
fairfax, va. 22031

p 703.273.6820

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VAN DORN & BEAUREGARD BIKE FACILITY & SHARED USE PATH

CONCEPT PLAN - 30%

CITY OF ALEXANDRIA, VIRGINIA

	10/21/2021	30% SUBMISSION
MARK	DATE	DESCRIPTION

PROJECT No.: 21266.001.00
DRAWING No.: 111028
DATE: 10/01/21
SCALE: NONE
DESIGN: EG
DRAWN: JS
CHECKED: AG

SHEET TITLE

GENERAL NOTES

SHEET No.

C101

LIGHTING | STREET POLE

Purpose

The street pole light shall be used to illuminate portions of the park system, including streets, park roads and trails.

General Information

Light fixtures shall be installed as a street or park road light in areas not guided by historic light fixture requirements or small area plan requirements.

Lighting in Public Open Space zoned properties requires a Special Use Permit.

The standard light fixture is Hadco, Inc., R53, or City approved equal.

Materials and Finish

The globe/post top shall be Type V, clear stabilized acrylic with a Victorian style roof.

The pole and fixture shall be finished with a black UV-resistant catalyzed urethane coating.

Lights shall be mounted on fiberglass, fluted and tapered decorative poles for post top lights.

Light poles/fixtures/luminaires shall be 14 feet total height from finished grade and installed with an anchor base.

The ornamental base cover shall be designed to cover the anchor bolts in one or two pieces, be vandal resistant and finished to match the post.

Lamps shall be LED.

Features

Light fixtures that require separate ballast boxes are not permitted.

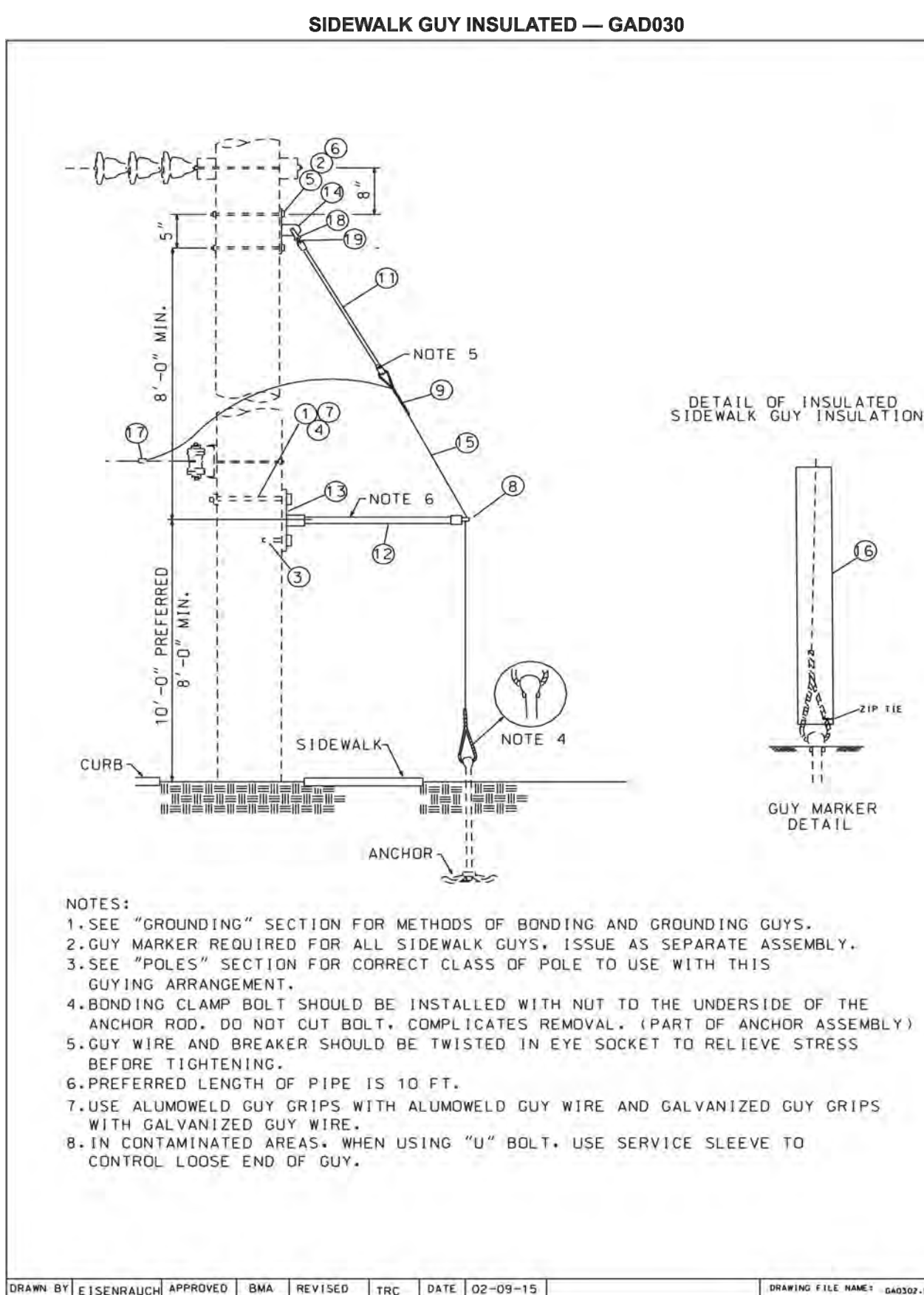
Post tops shall include full top reflectors and may include a house side shield if warranted by the pole location.

Color temperature shall be between 3,000K and 4,000K.



Fiberglass fluted base

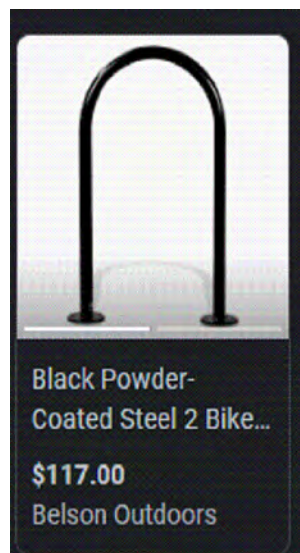
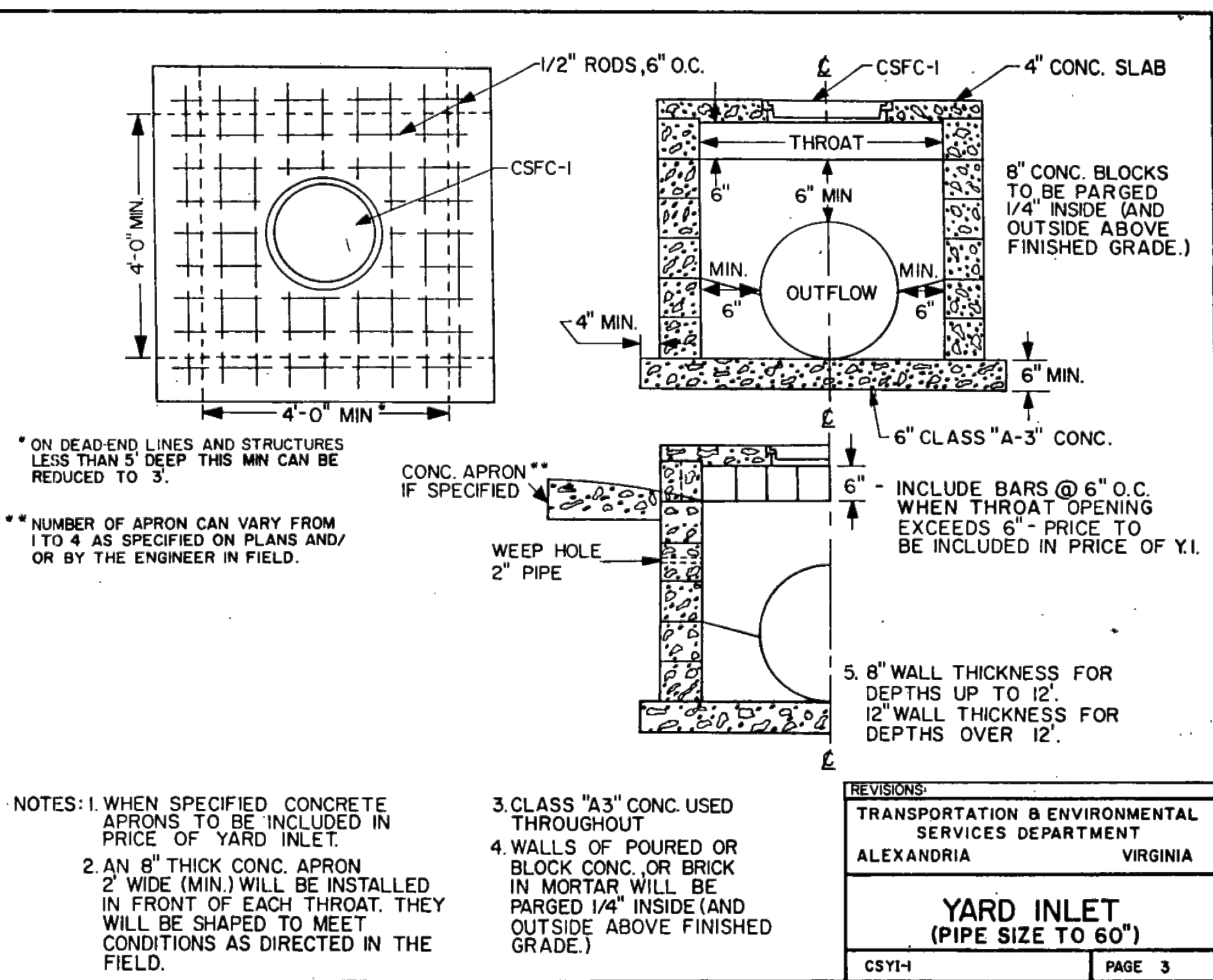
GUYS AND ANCHORS



Electric Distribution Overhead Construction Manual Page 17
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RETAINING WALL NOTES:

1. RETAINING WALL HEIGHTS RANGE FROM 0.5' TO 4.5'.
2. FOR RETAINING WALL HEIGHTS LESS THAN OR EQUAL TO 3', SEGMENTAL BLOCK / GRAVITY WALL WITH NO GEOGRID CAN BE USED (PROVIDED THAT THERE ARE NO SURCHARGE LOADS)
3. FOR WALL HEIGHTS GREATER THAN 3', GEOGRID WILL BE REQUIRED AND THE LENGTH OF THE GEOGRID WILL BE EQUIVALENT TO THE HEIGHT OF THE WALL.
4. IF THERE ARE CONSTRAINTS THAT DON'T ALLOW FOR THE SEGMENTAL BLOCK / GRAVITY WALL, A REINFORCED CONCRETE WALL CAN BE USED INSTEAD.



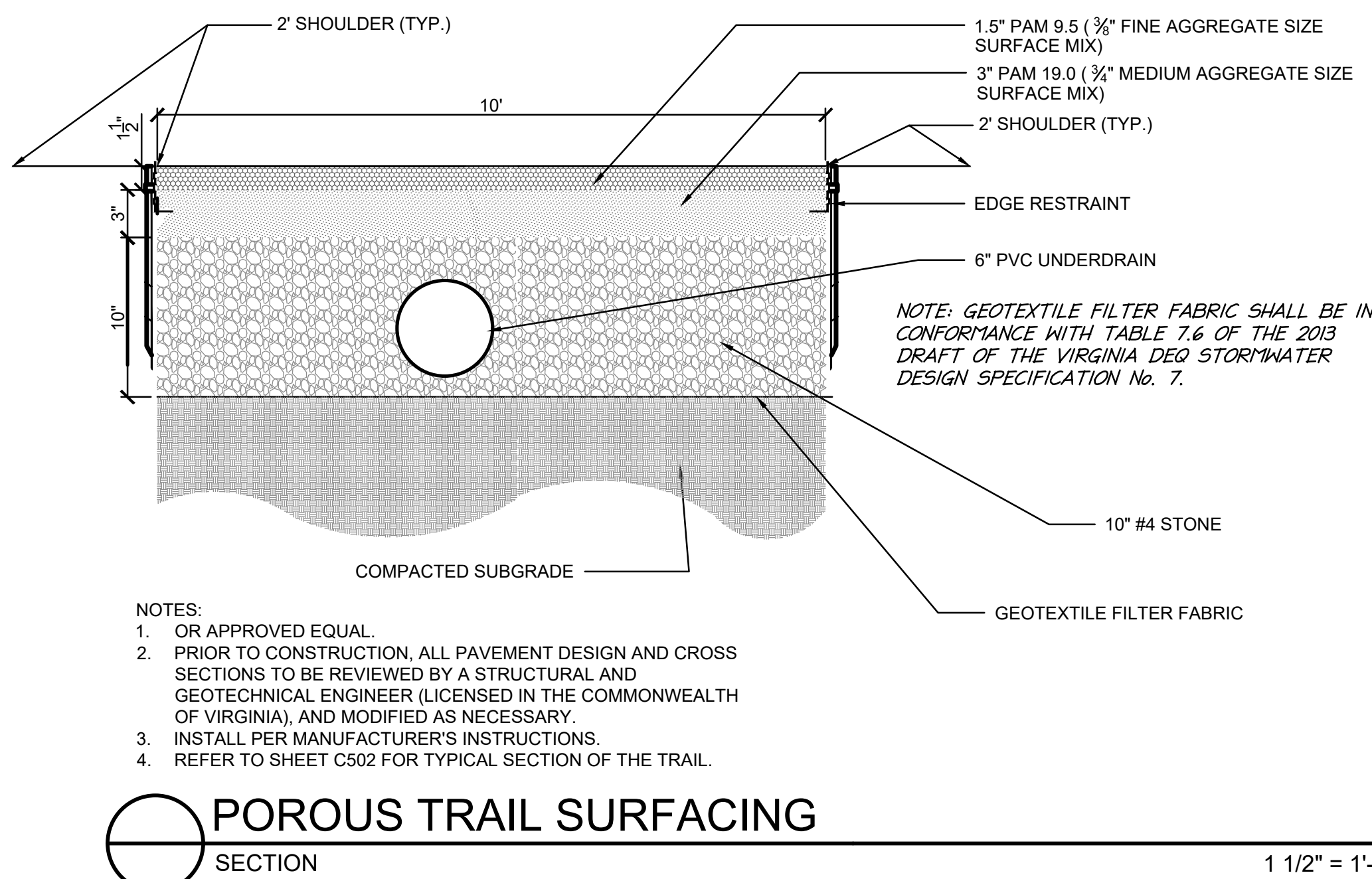
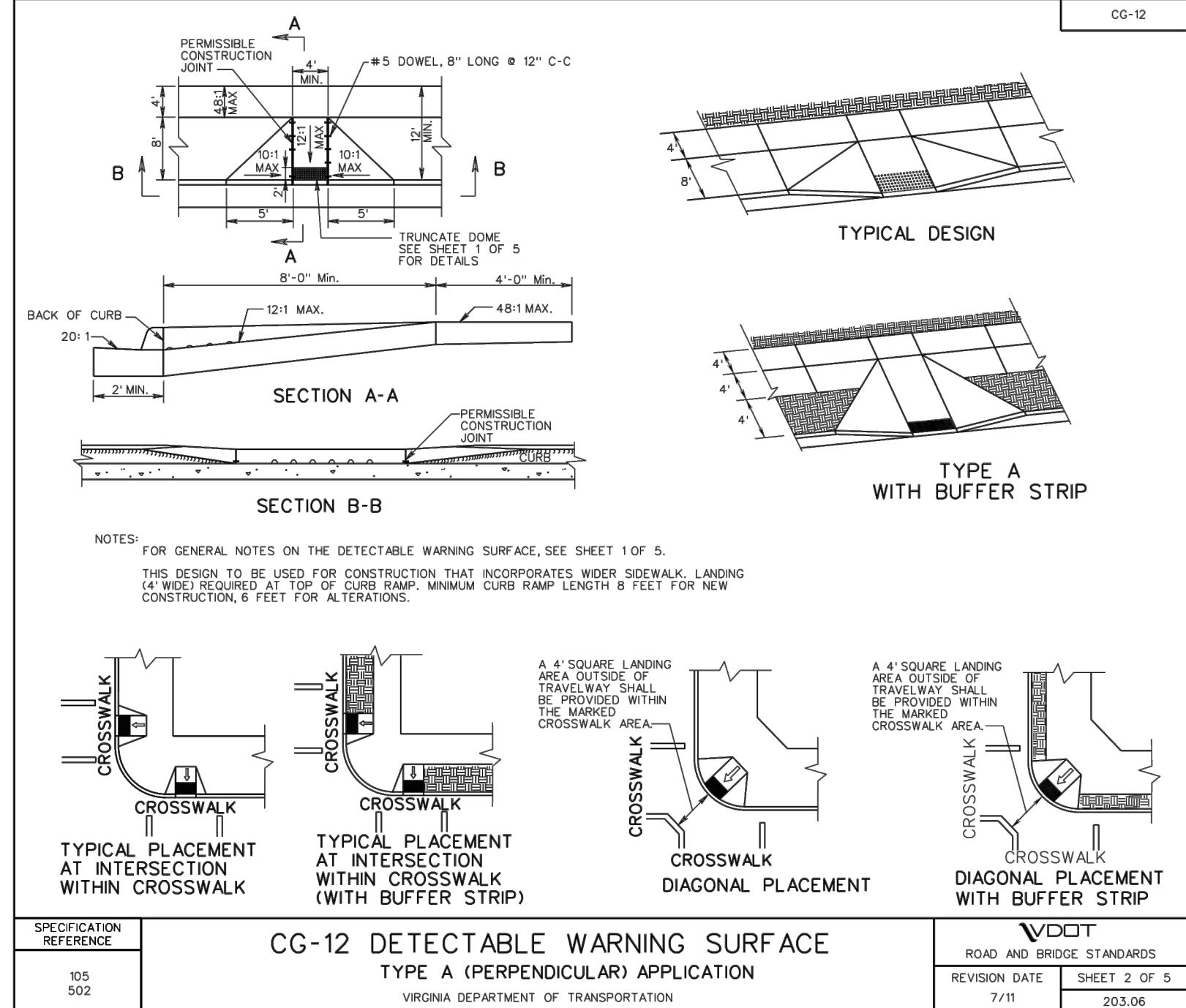
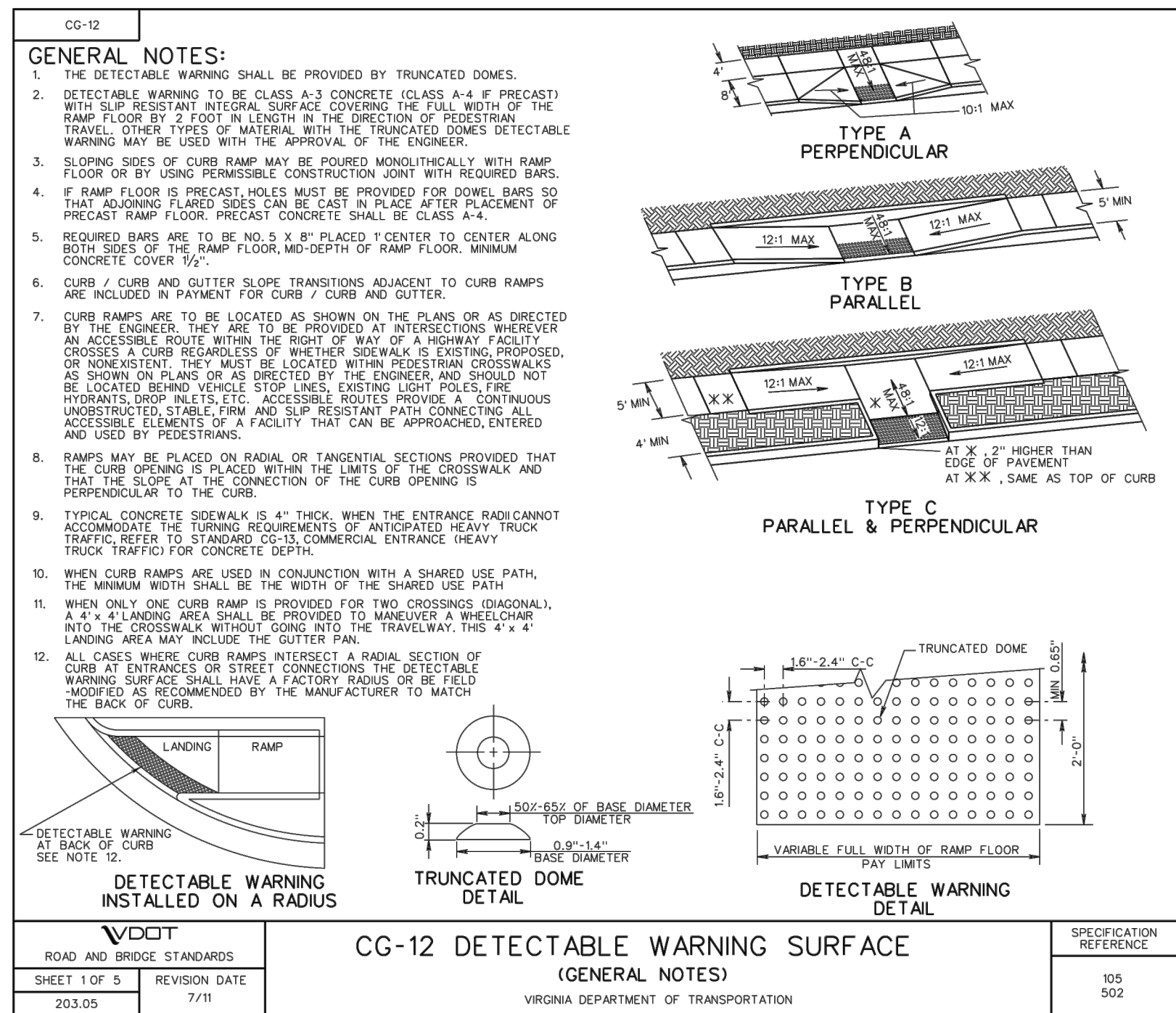
BIKE RACK



BENCH



FIXIT STATION

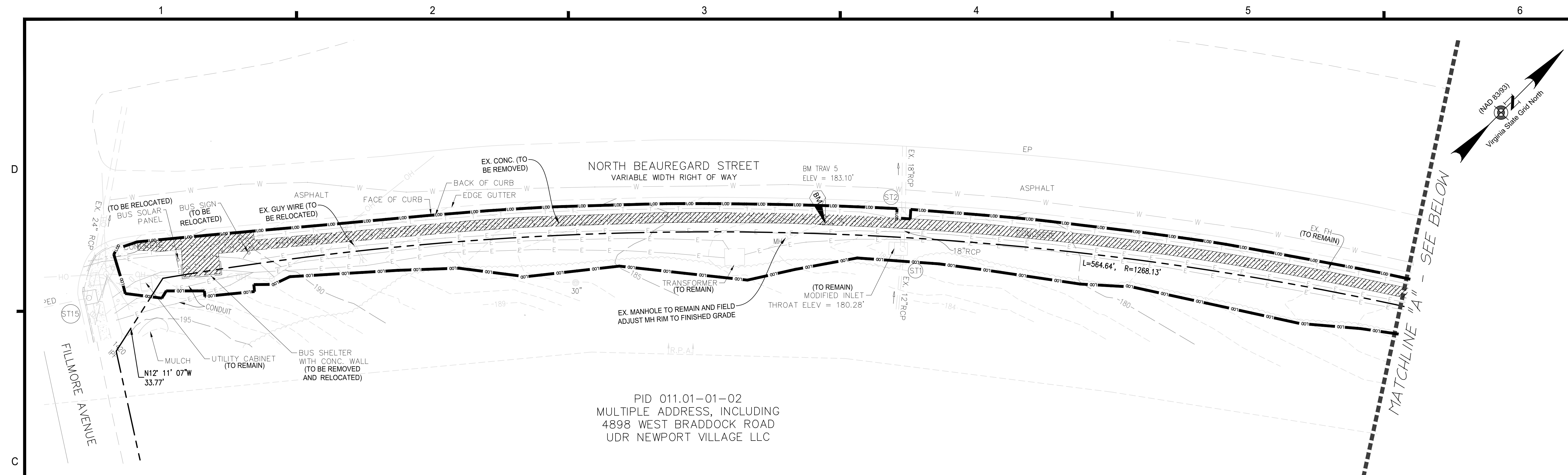


- NOTES:
1. OR APPROVED EQUAL.
 2. PRIOR TO CONSTRUCTION, ALL PAVEMENT DESIGN AND CROSS SECTIONS TO BE REVIEWED BY A STRUCTURAL AND GEOTECHNICAL ENGINEER (LICENSED IN THE COMMONWEALTH OF VIRGINIA), AND MODIFIED AS NECESSARY.
 3. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 4. REFER TO SHEET C502 FOR TYPICAL SECTION OF THE TRAIL.

POROUS TRAIL SURFACING

SECTION

$$1\ 1/2'' = 1'-0''$$



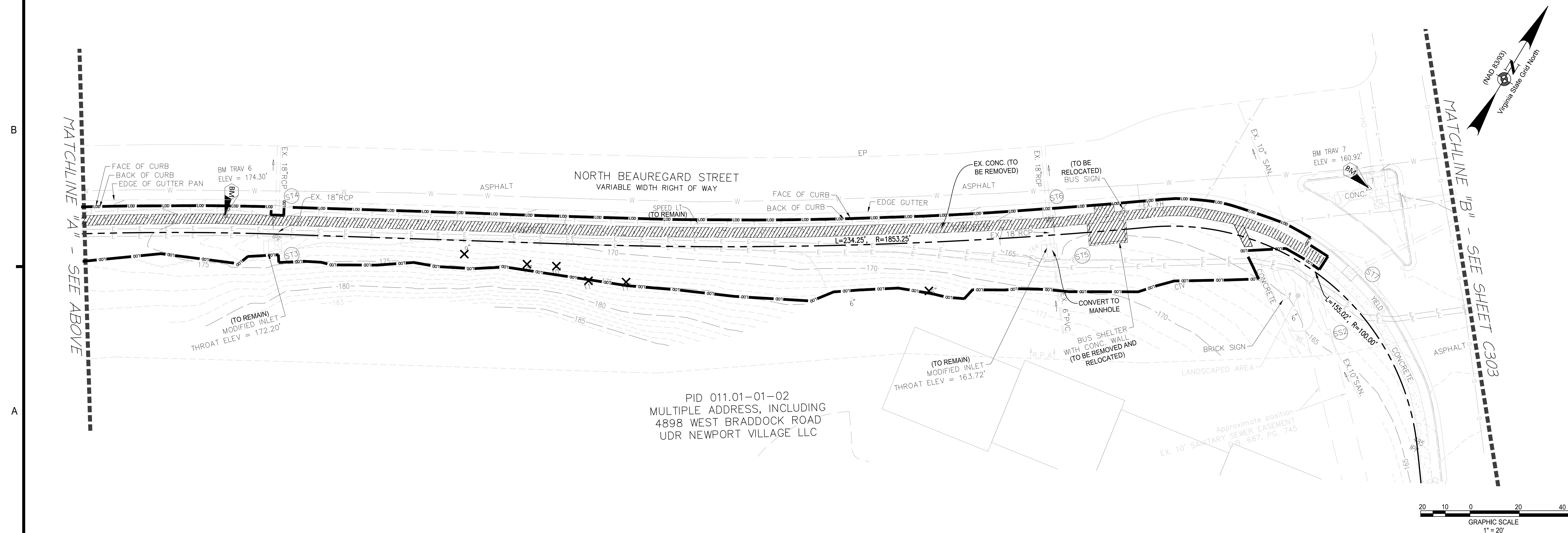
LEGEND



EXISTING TREE TO BE REMOVED

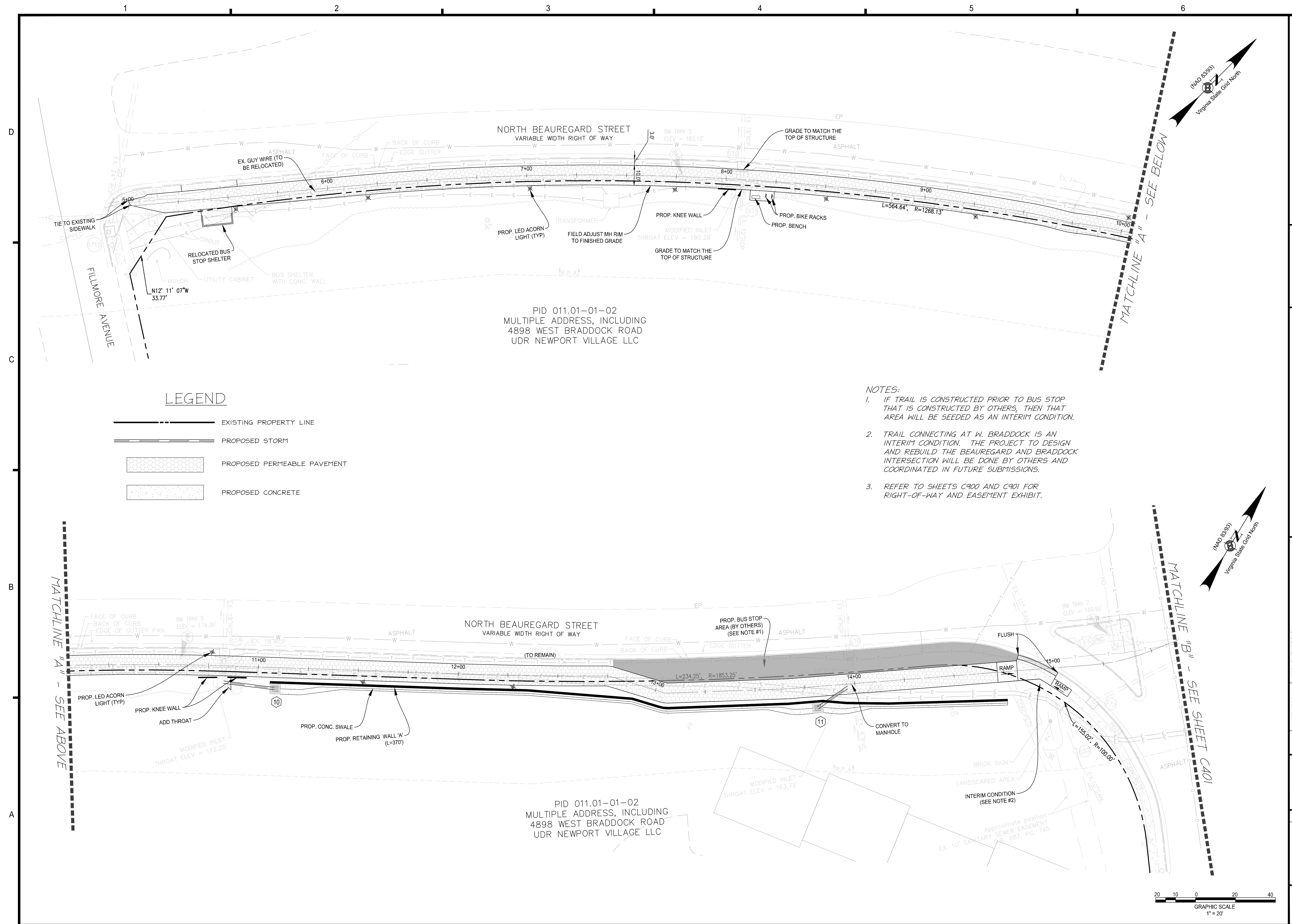


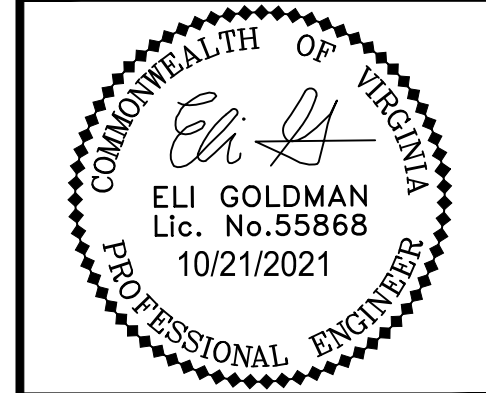
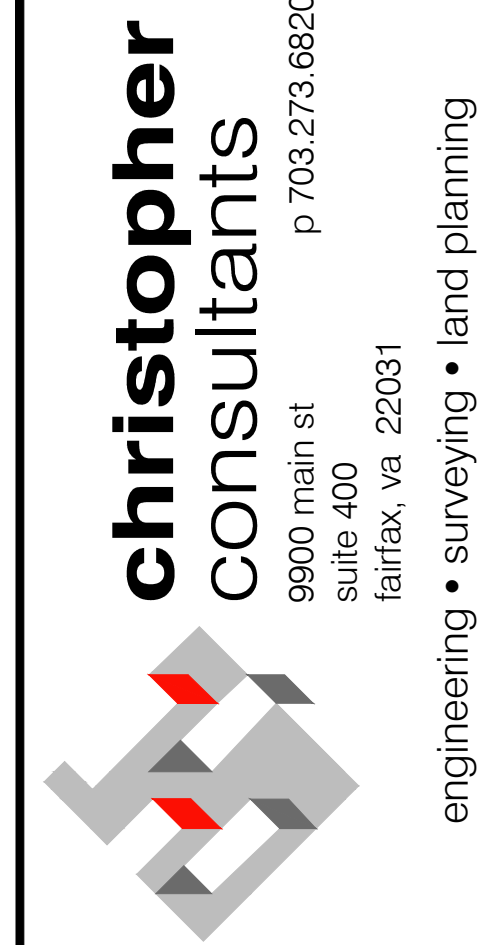
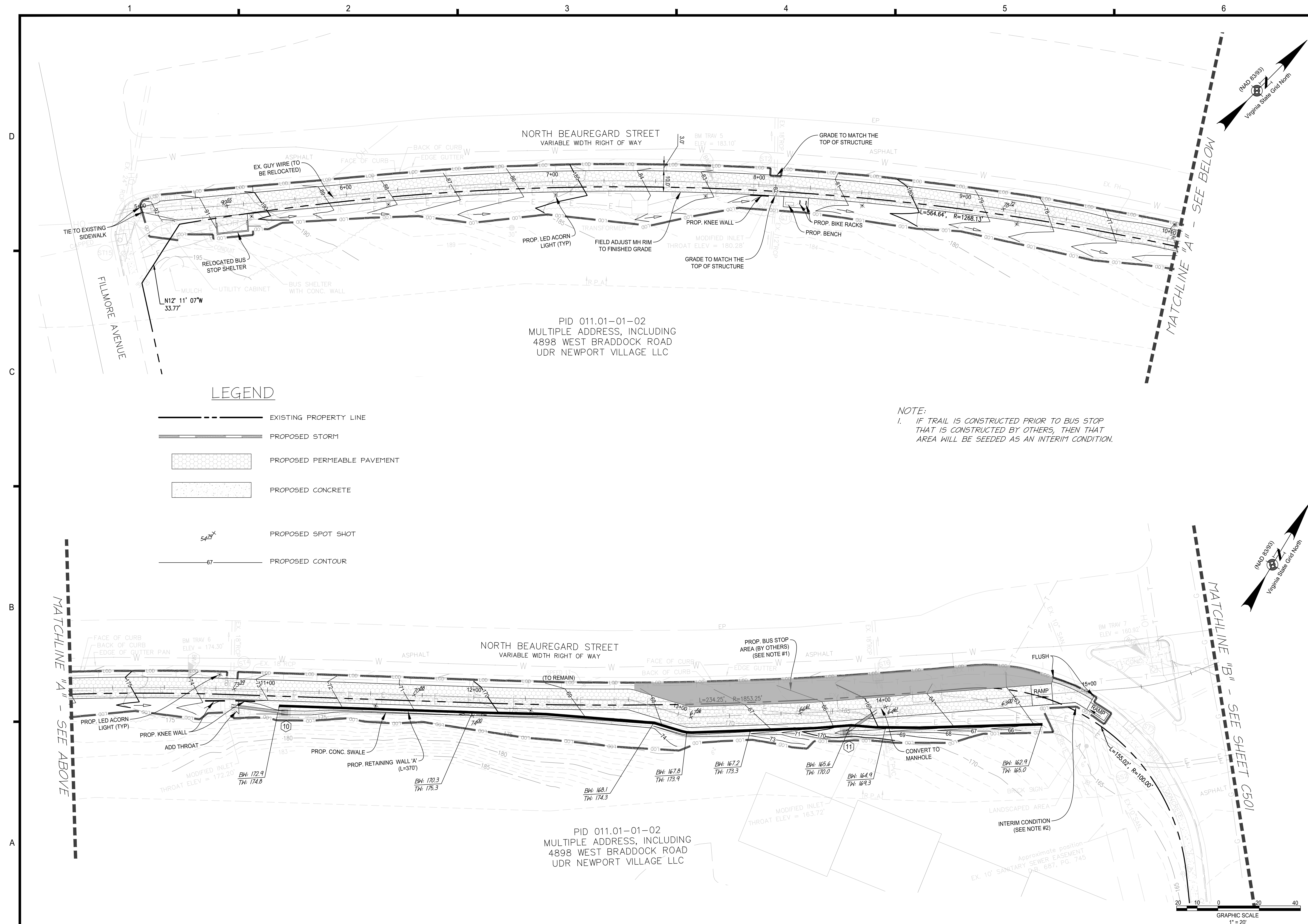
EXISTING CONCRETE TO BE REMOVED



20 10 0 20 40
GRAPHIC SCALE
1" = 20'

	10/21/2021	30% SUBMISSION
MARK	DATE	DESCRIPTION





**VAN DORN & BEAUREGARD BIKE
FACILITY & SHARED USE PATH
CONCEPT PLAN - 30%
CITY OF ALEXANDRIA, VIRGINIA**

	10/21/2021	30% SUBMISSION
MARK	DATE	DESCRIPTION

PROJECT No.: 21266.001.00
DRAWING No.: 111028
DATE: 10/01/21
SCALE: 1"=20'
DESIGN: EG
DRAWN: JS
CHECKED: AG

SHEET TITLE:

CONCEPTUAL
GRADING PLAN

SHEET No.

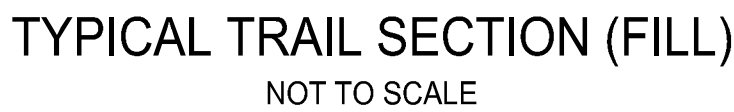
C500

CITY OF ALEXANDRIA, VIRGINIA

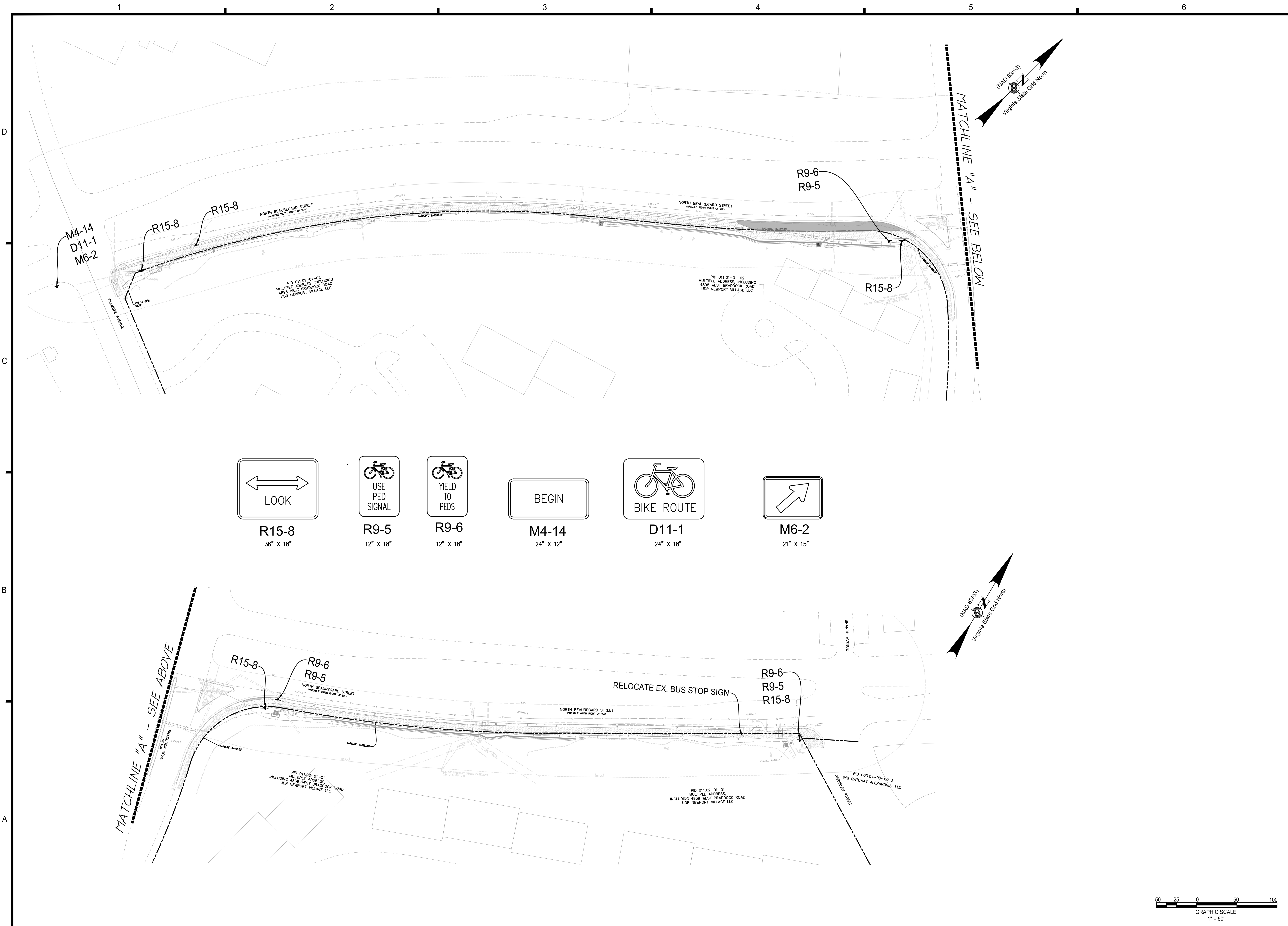
PROJECT No.: 21266.001.00
DRAWING No.: 111028
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SCALE: NONE
DESIGN: EG
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TYPICAL TRAIL SECTION

C502



BUS STOP AREA
NOT TO SCALE



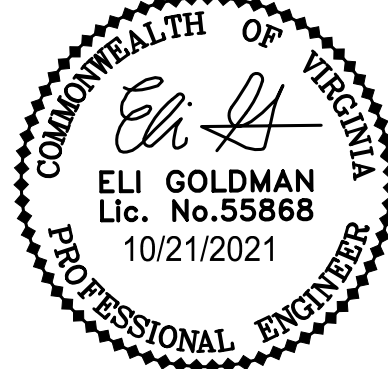


christopher
consultants

9900 main st
suite 400
fairfax, va 22031

p 703.273.6620

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COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No. 55868
10/21/2021
PROFESSIONAL ENGINEER

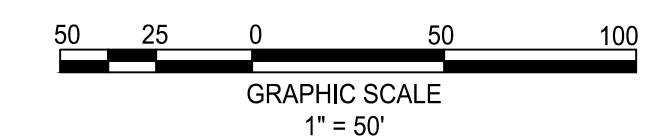
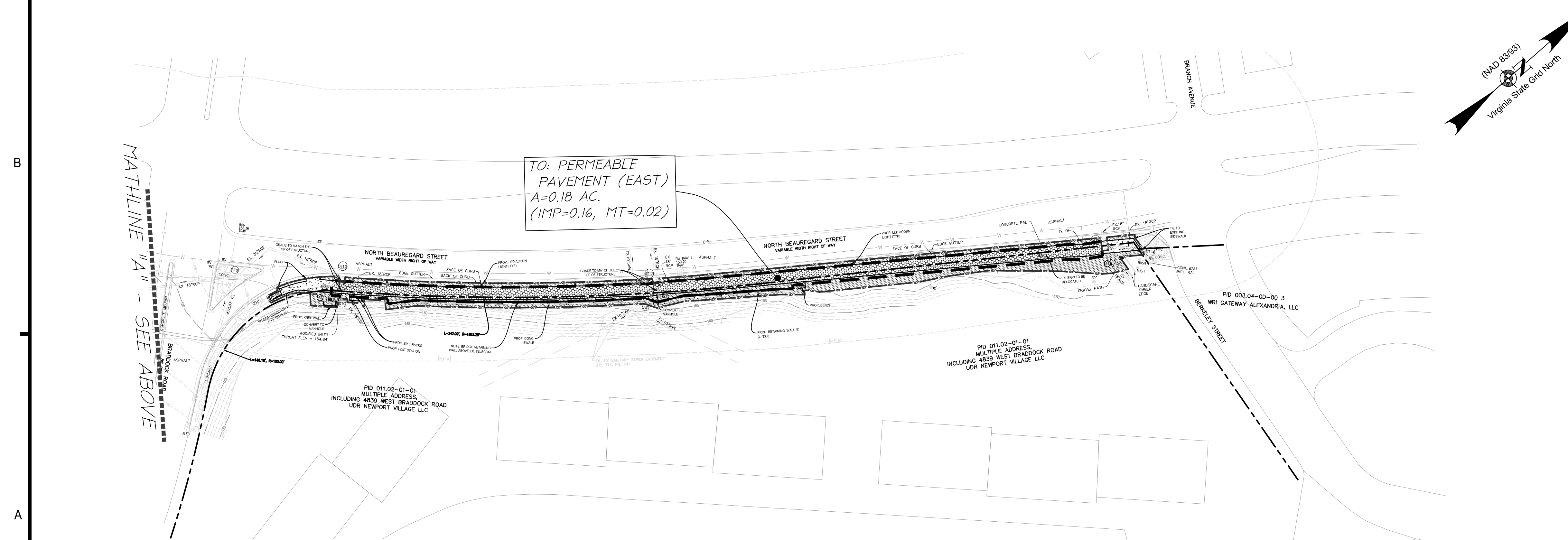
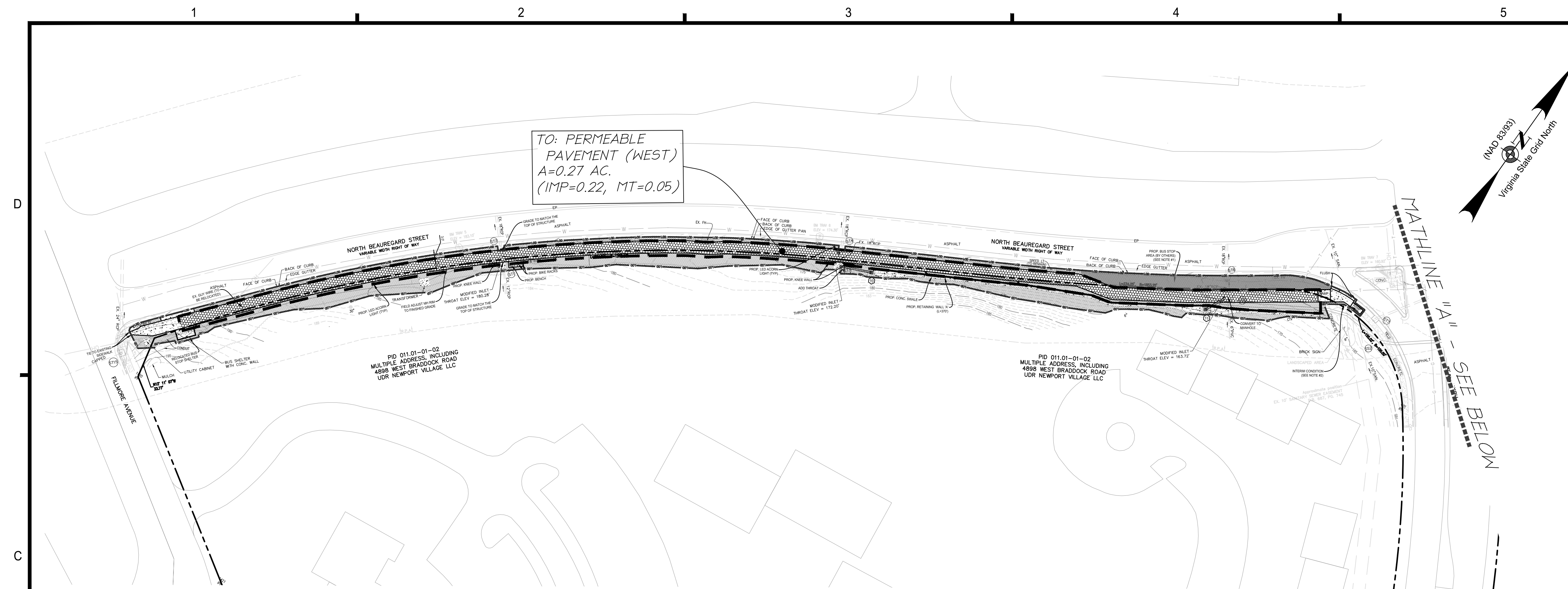
VAN DORN & BEAUREGARD BIKE
FACILITY & SHARED USE PATH
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CITY OF ALEXANDRIA, VIRGINIA

30% SUBMISSION		DESCRIPTION	
10/21/2021		MARK	DATE




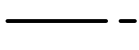

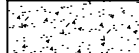
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DRAWING No.: 111028
DATE: 10/01/21
SCALE: 1"=50'
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CHECKED: AG

SHEET TITLE:
**CONCEPTUAL
SIGNAGE PLAN**

SHEET No.
C503



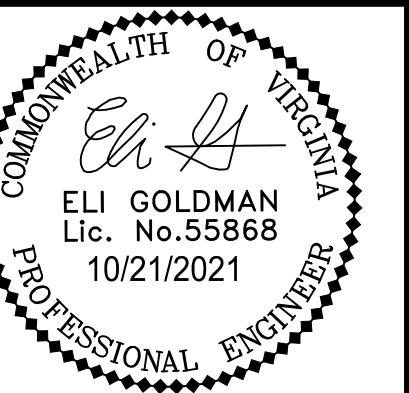
POST BMP MAP LEGEND

-  : BMP LIMITS
 (AREA = 0.83 AC.)
-  : DRAINAGE DIVIDES
-  : PROPERTY LINE
-  : MANAGED TURF
 (AREA = 0.41 AC.)
-  : CONCRETE
 (AREA = 0.06 AC.)
-  : PERMEABLE PAVEMENT
 (AREA = 0.36 AC.)

NOTE: TOTAL IMPERVIOUS AREA = 0.42 AC



**christopher
consultants**
p 703.273.6820
9900 main st
suite 400
fairfax, va 22031
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**VAN DORN & BEAUREGARD BIKE
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CONCEPT PLAN - 30%
CITY OF ALEXANDRIA, VIRGINIA**

[illegible]

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SHEET TITLE:

POST BMP MAP

SHEET No.

C601

DCBA

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.07	0.07	0.25
Impervious Cover (acres)				0.38	0.38	0.95
				Total	0.45	

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr)	0.86
Post Development Treatment Volume in D.A. A (ft ³)	1,374

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
3. Permeable Pavement (RR)													
3.a. Permeable Pavement #1 (Spec #7)	45		0.38	0	590	721	1,310	25	0.00	0.82	0.48	0.34	

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.38	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.38	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.07	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft ³)	1,820
--	-------

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	590	0	0	0	0	590
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.86	0.00	0.00	0.00	0.00	0.86
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.48	0.00	0.00	0.00	0.00	0.48
TP LOAD REMAINING (lb/yr)	0.38	0.00	0.00	0.00	0.00	0.38
ITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	3.46	0.00	0.00	0.00	0.00	3.46

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.14
TP LOAD REDUCTION REQUIRED (lb/yr)	0.48
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.48
TP LOAD REMAINING (lb/yr):	0.66
TP LOAD REDUCTION REQUIRED (lb/yr):	0.00

***No further TP load reduction required (Required - Achieved < 0.005 lb/yr)

Total Nitrogen (For Information Purposes)	
POST-DEVELOPMENT LOAD (lb/yr)	8.18
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	3.46
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	4.73

BMP VRRM Drainage Area Breakdown						
Drainage Area 'A' (Block A1)		Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed (nonproprietary)	Notes
BMP Device						
3.a. Permeable Pavement #1 (Spec #7)		0.38	0.38	0.00	0.48	0.48
Total Treated		0.38	0.38	0.00	0.48	0.48
Untreated		0.00	0.00	0.00		
Total		0.38	0.38	0.00		
Grand Total Phosphorus Removed					0.48	0.48
Total Phosphorus Requirement					0.48	0.31

Phosphorus Load Reduction Requirements							
DA	Area (ac.)	Pre - Imp	Pre - Perv	Post - Imp ⁽²⁾	Post - Perv	TP Reduction Required	TP Reduction Required with nonproprietary BMPs ⁽¹⁾
BMP Limits	0.83	0.18	0.65	0.42	0.41	0.48	0.31

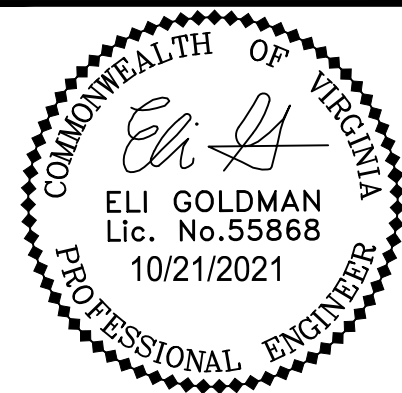
Notes:

(1) Per City's memo-to-industry (01-18), 65% of the total phosphorus removal required by the VRRM must be achieved through nonproprietary BMPs (green infrastructure).

(2) City's WQIF requirement that 100% of the site's impervious area be treated or pay a fee in lieu of (\$2/sf) for any untreated impervious area. The impervious area in the Right-Of-Way is excluded from this requirement

CONCEPTUAL BMP (QUALITY) NARRATIVE:
TO COMPLY WITH THE CITY AND STATE'S WATER QUALITY REQUIREMENTS, A MAJORITY OF THE PROPOSED TRAIL IS DESIGNED AS LEVEL 1 PERMEABLE PAVEMENT. AS SHOWN ON THIS SHEET, THIS APPROACH SATISFIES THE BMP REQUIREMENTS OF THE VRRM SPREADSHEET.

CONCEPTUAL SWM (QUANTITY) NARRATIVE:
TO COMPLY WITH THE CITY AND STATE'S WATER QUANTITY REQUIREMENTS, DETENTION WILL BE PROVIDED IN THE STONE RESERVOIR LAYER OF THE PERMEABLE PAVEMENT. ENOUGH DETENTION WILL BE PROVIDED TO REDUCE THE POST-DEVELOPED RUNOFF RATE FOR THE 2-YEAR AND 10-YEAR STORMS LESS THAN PRE-DEVELOPED CONDITIONS.



VAN DORN & BEAUREGARD BIKE
FACILITY & SHARED USE PATH
CONCEPT PLAN - 30%
CITY OF ALEXANDRIA, VIRGINIA

[illegible]

PROJECT No.: 21266.001.00
DRAWING No.: 111028
DATE: 10/01/21
SCALE: 1"=20'
DESIGN: EG
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SHEET TITLE

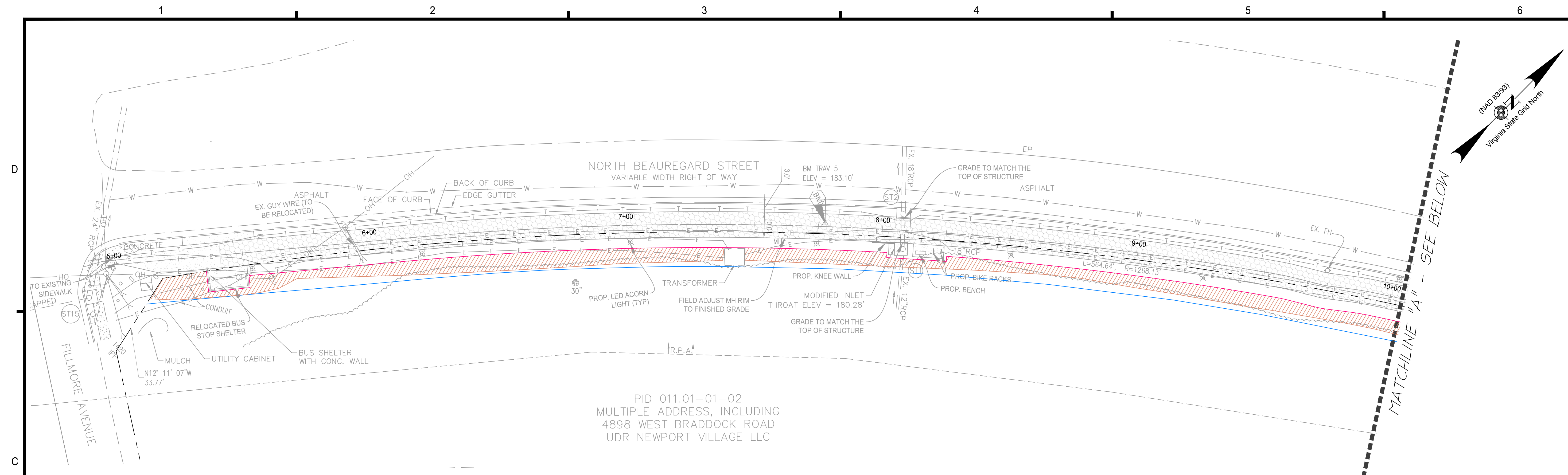
BMP WATER QUALITY

SHEET No.

C602

NOTES

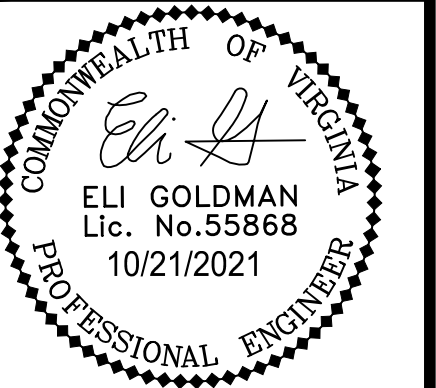
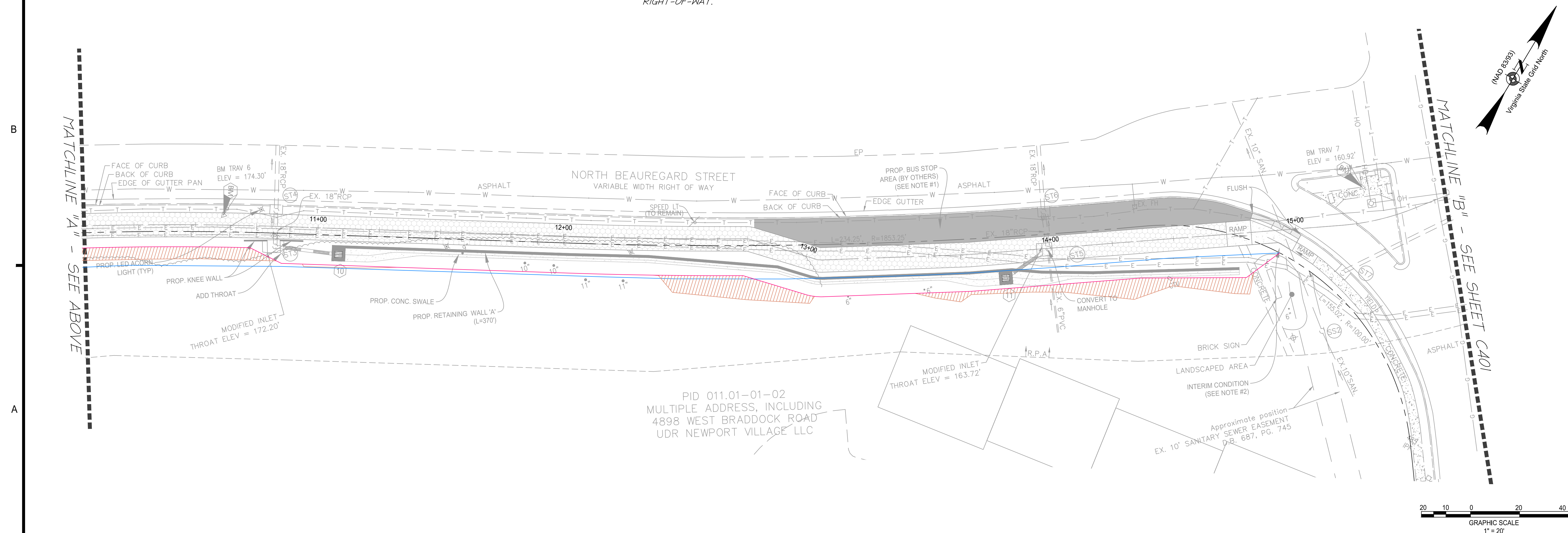
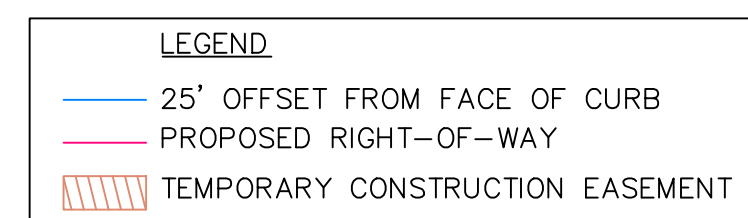
C701



PID 011.01-01-02
MULTIPLE ADDRESS, INCLUDING
4898 WEST BRADDOCK ROAD
UDR NEWPORT VILLAGE LLC

NOTES:

1. THE PROPOSED RIGHT-OF-WAY SHOWN IS THE MINIMUM NEEDED FOR THE TRAIL AND RETAINING WALL TO BE LOCATED ON PUBLIC PROPERTY.
2. THE TEMPORARY CONSTRUCTION EASEMENT IS THE AREA OUTSIDE OF THE PROPOSED-RIGHT OF WAY THAT WILL BE DISTURBED DURING CONSTRUCTION.
3. THE 25' OFFSET OF THE FACE OF CURB IS THE POTENTIAL FUTURE RIGHT-OF-WAY LINE FROM THE NEWPORT VILLAGE DEVELOPMENT IF THAT PROJECT PROCEEDS AND THEY DEDICATE THIS RIGHT-OF-WAY.



VAN DORN & BEAUREGARD BIKE
FACILITY & SHARED USE PATH
CONCEPT PLAN - 30%
CITY OF ALEXANDRIA, VIRGINIA

[illegible]

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SHEET TITLE:

ROW AND EASEMENT EXHIBIT

SHEET No.

C900

